IN THE CLAIMS:

Please cancel claims 23-45 without prejudice and replace the claims as follows:

1. (Original) An isolated DNA molecule encoding a zebrafish bone morphogenetic protein 4 gene, comprising a nucleic acid sequence selected from the group consisting of SEQ. ID NO. 1, SEQ. ID NO. 4, SEQ. ID NO. 7, SEQ ID No. 8, SEQ ID No. 9 and derivatives and fragments thereof.

2. (Original) A recombinant expression vector comprising a portion of the isolated DNA molecule of claim 1.

3. (Original) The recombinant expression vector of claim 2, wherein the portion of the isolated DNA molecule is operatively linked to a nucleotide sequence encoding a heterologous expression product.

4. (Original) The recombinant expression vector of claim 3, wherein the heterologous expression product is a reporter protein selected from the group consisting of β-galactosidase, luciferase, chloramphenicol acetyl transferase (CAT), green fluorescent protein (GFP), human growth hormone, alkaline phosphatase, β-glucuronidase, and combinations thereof.

5. (Original) A cell comprising the isolated DNA molecule of claim 1.

6. (Original) An embryo comprising the isolated DNA molecule of claim 1.

7. (Original) A transgenic zebrafish comprising the isolated DNA molecule of claim 1.

8. (Original) An embryo comprising an expression sequence operably linked to a DNA sequence encoding a heterologous expression product, wherein the expression sequence is selected from the group consisting of a portion of a zebrafish bone morphogenetic protein 4 promoter region, zebrafish bone morphogenetic protein 4

proximal regulatory sequences, zebrafish bone morphogenetic protein 4 distal regulatory sequences, SEQ. ID NO. 1, SEQ. ID NO. 4, SEQ. ID NO. 7, SEQ. ID NO. 8, SEQ. ID NO. 9, and derivatives and fragments thereof.

9. (Original) The embryo of claim 8, wherein the heterologous expression product is a reporter protein selected from the group consisting of β-galactosidase, luciferase, chloramphenicol acetyl transferase (CAT), green fluorescent protein (GFP), human growth hormone, alkaline phosphatase, β-glucuronidase, and combinations thereof.

10. (Original) The embryo of claim 9, wherein the reporter protein is green fluorescent protein.

11. (Original) The embryo of claim 8, wherein the expression sequence directs stable expression of the heterologous expression product.

12. (Original) The embryo claim 8, wherein the expression of the heterologous expression product is transmitted through the germ line.

13. (Original) The embryo of claim 8, wherein the expression sequence and the sequence encoding the heterologous expression product are contained in an exogenous construct.

14. (Original) The embryo of claim 8, wherein the exogenous construct is integrated into the genome of the embryo.

15. (Original) The embryo of claim 8, wherein the embryo is a zebrafish embryo.

16. (Original) The embryo of claim 15, wherein the zebrafish embryo is developed into an adult transgenic fish containing the expression sequence to direct the expression of the heterologous expression product.

17. (Original) The embryo of claim 8, wherein the expression sequence is a tissue-specific expression sequence.

18. (Original) The embryo of claim 17, wherein the expression sequence is a heart-specific expression sequence.

19. (Original) The embryo of claim 17, wherein the expression sequence is for expression in tisues and organs selected from the group consisting of eyes, otic vesicles, hatching gland, anus, caudal fin, and combinations thereof.

20. (Original) An isolated tissue-specific transcriptional regulatory DNA fragment comprising a DNA sequence selected from the group consisting of SEQ. ID NO. 1, SEQ. ID NO. 7, SEQ. ID NO. 8, SEQ. ID NO. 9, and derivatives and fragments thereof.

21. (Original) The isolated tissue-specific transcriptional regulatory DNA fragment of claim 20, wherein the DNA sequence is derived from SEQ. ID NO. 1, and derivatives and fragments thereof for directing heart-specific expression.

22. (Original) The isolated tissue-specific transcriptional regulatory DNA fragment of claim 20, wherein the DNA sequence is derived from SEQ. ID NO. 1, SEQ. ID NO. 7, SEQ. ID NO. 8, SEQ. ID NO. 9, and derivatives and fragments thereof for directing expression in tissues and organs selected from the group consisting of eyes, otic vesicles, hatching gland, anus, caudal fin and combinations thereof.

23.-45. (Cancelled)